

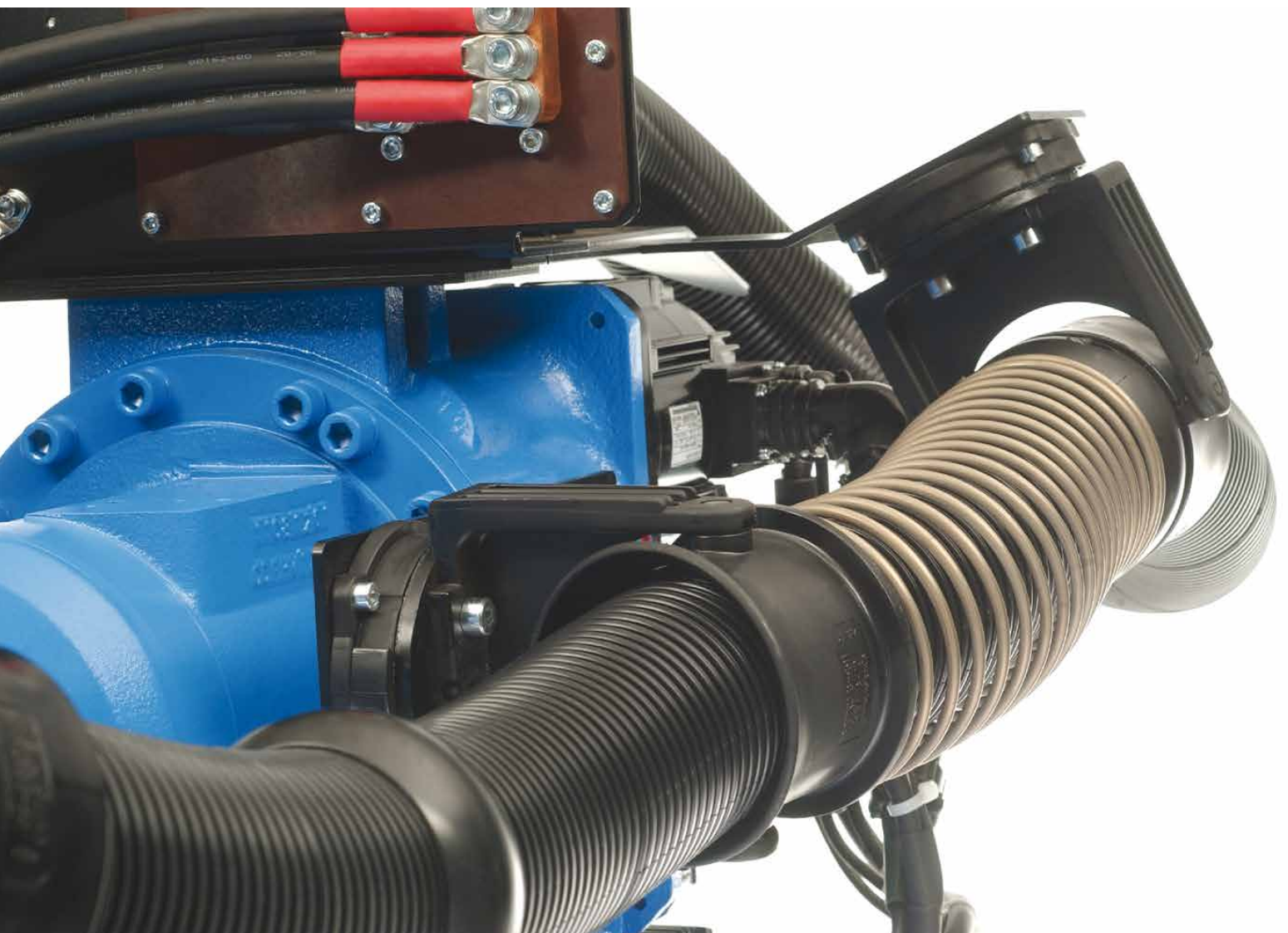
Solution 2

Energy conduit system with spring guide



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Add-on parts



System holder / clamping clip

One-piece system holder / clamping clips made from plastic with and without metal closure. Ideal for quick installation and removal of dresspacks.



Type	Order no.	Material	Colour	PU pce.	Remarks
Clamping clip					
Clamping clip; NW 29K	902001	PA	Black	1	
Clamping clip; NW 36S	940626	PA	Black	1	
Clamping clip; NW 52M	902205	PA	Black	1	
Clamping clip; NW 70M	902207	PA	Black	1	
Clamping clip; NW 70K	902208	PA	Black	1	



Type	Order no.	Material	Colour	PU pce.	Remarks
System holder					
System holder reinforced, NW 23	99775	PA	Black	1	
System holder reinforced, NW 29	99776	PA	Black	1	
System holder reinforced, NW 36	99777	PA	Black	1	

Middle jaw / combi jaw

Two-piece plastic jaws for installing the corrugated tubes in the clamping clips and for fixing the strain reliefs.



Type	Order no.	Material	Colour	PU pce.	Remarks
Middle jaws; NW 23	902002	PA	Black	1	matching clamping clip; NW 29K
Middle jaws; NW 29	902009	PA	Black	1	matching clamping clip; NW 29K
Middle jaw; NW 36 / 36	940627	PA	Black	1	matching clamping clip; NW 36S
Middle jaw; NW 36 / 52	902211	PA	Black	1	matching clamping clip; NW 52M
Combi jaw; NW 52	902213	PA	Black	1	matching clamping clip; NW 52M
Middle jaws; NW 70	902214	PA	Black	1	matching clamping clip; NW 70M clamping clip; NW 70K
Combi jaws; NW 70	902223	PA	Black	1	matching clamping clip; NW 70M clamping clip; NW 70K

Articulated piece

The multi-piece articulated pieces permit movements of the dresspack up to 30° in circular tracks on the end of the dresspack.



Type	Order no.	Material	Colour	PU pce.	Remarks
NW36					
Ball joint jaws NW36	902007	PA	Black	1	
Protector NW36	902232	PA	Black	1	
Cable star NW36	902005	TPE outer sheath	Black	1	
Dummy plug 7.5 mm	902006	TPE outer sheath	Black	2	
Dummy plug 10.0 mm	902246	TPE outer sheath	Black	1	
Dummy plug 22.0mm	902003	TPE outer sheath	Black	1	
Hose clip, 32-50 mm	902849	Alu	natural	1	
Clamping clip NW 52	902205	PA	Black	1	
NW52					
Ball joint jaws NW52	902251	PA	Black	1	
Protector NW52	902234	PA	Black	1	
Cable star NW52	902237	TPE outer sheath	Black	1	
Dummy plug 10.0 mm	902246	TPE outer sheath	Black	1	
Dummy plug 12.5mm	902247	TPE outer sheath	Black	2	
Dummy plug 19.5mm	902250	TPE outer sheath	Black	2	
Hose clip, 40-60mm	902315	Alu	natural	1	
Clamping clip NW 70	902207	PA	Black	1	

Ball joint

The ball joint is used for holding a dresspack in the system holder. This allows the dresspack adequate freedom of movement, because it can move approx. 22° in all directions when in the installed system holder.
The globe variant additionally absorbs torsion from the corrugated hose.



Type	Order no.	Material	Colour	PU pce.	Remarks
NW36					
Ball joint jaws NW36	902007	PA	Black	1	matching clamping clip NW 52M
Protector NW36	902232	PA	Black	1	
NW52					
Ball joint jaws NW52	902251	PA	Black	1	matching clamping clip NW 70M
Protector NW52	902234	PA	Black	1	
NW70					
Connection element NW70	942551	PA	Black	1	matching clamping clip NW 70M
Globe NW70	942550	PA	Black	1	

Strain relief

Strain relief for securing the cables in the dresspack. The cables can easily be installed in the elastic cable star. Unoccupied bushings are sealed tight with the dummy plug.



Type	Order no.	Material	Colour	PU pce.	Remarks
Cable star					
Cable star, NW23, bk, blind	902263	TPE outer sheath	Black	1	dummy
Cable star, NW29, bk, blind	940005	TPE outer sheath	Black	1	dummy
Cable star, NW36, bk, blind	902008	TPE outer sheath	Black	1	dummy
Cable star, NW36, bk, drilling pattern	902005	TPE outer sheath	Black	1	1 x 6.0 / 2 x 7.5 / 1 x 10.0 / 1 x 22.0
Cable star, NW52, bk, drilling pattern	902237	TPE outer sheath	Black	1	1 x 10.0 / 2 x 12.5 / 2 x 19.0
Cable star, NW70, bk, drilling pattern	902240	TPE outer sheath	Black	1	4 x 14.0 / 4 x 19.0 / 1 x 28.0
Dummy plug					
Dummy plug 7.5 mm	902006	TPE outer sheath	Black	1	
Dummy plug 10.0mm	902246	TPE outer sheath	Black	1	
Dummy plug 12.5mm	902247	TPE outer sheath	Black	1	
Dummy plug 14.0mm	902248	TPE outer sheath	Black	1	
Dummy plug 19.5mm	902250	TPE outer sheath	Black	1	
Dummy plug 22.0mm	902003	TPE outer sheath	Black	1	
Dummy plug 28.0mm	902004	TPE outer sheath	Black	1	
Hose clip					
Hose clip, NW23, 16-27 mm	902842	ALU	natural	1	
Hose clip, NW29, 23-35 mm	902848	ALU	natural	1	
Hose clip, NW36, 32-50 mm	902849	ALU	natural	1	
Hose clip, NW52, 40-60 mm	902315	ALU	natural	1	
Hose clip, NW70, 70-90 mm	902316	ALU	natural	1	

Swivel bearing

Swivel bearing made from plastic with multiple holder for system holder / clamping clip or rotating fork.



Type	Order no.	Material	Colour	PU pce.	Remarks
Rotating flange NW52, bk	902255	PA	Black	1	
Rotating flange NW70, bk	902252	PA	Black	1	

Clamping clip / pipe clamping piece / adapter plate

The clamping clip provides attaching an attachment point to axis 6. The pipe clamping piece and the adapter plate can be used for mounting all system holders/clamping clips and articulated end pieces.



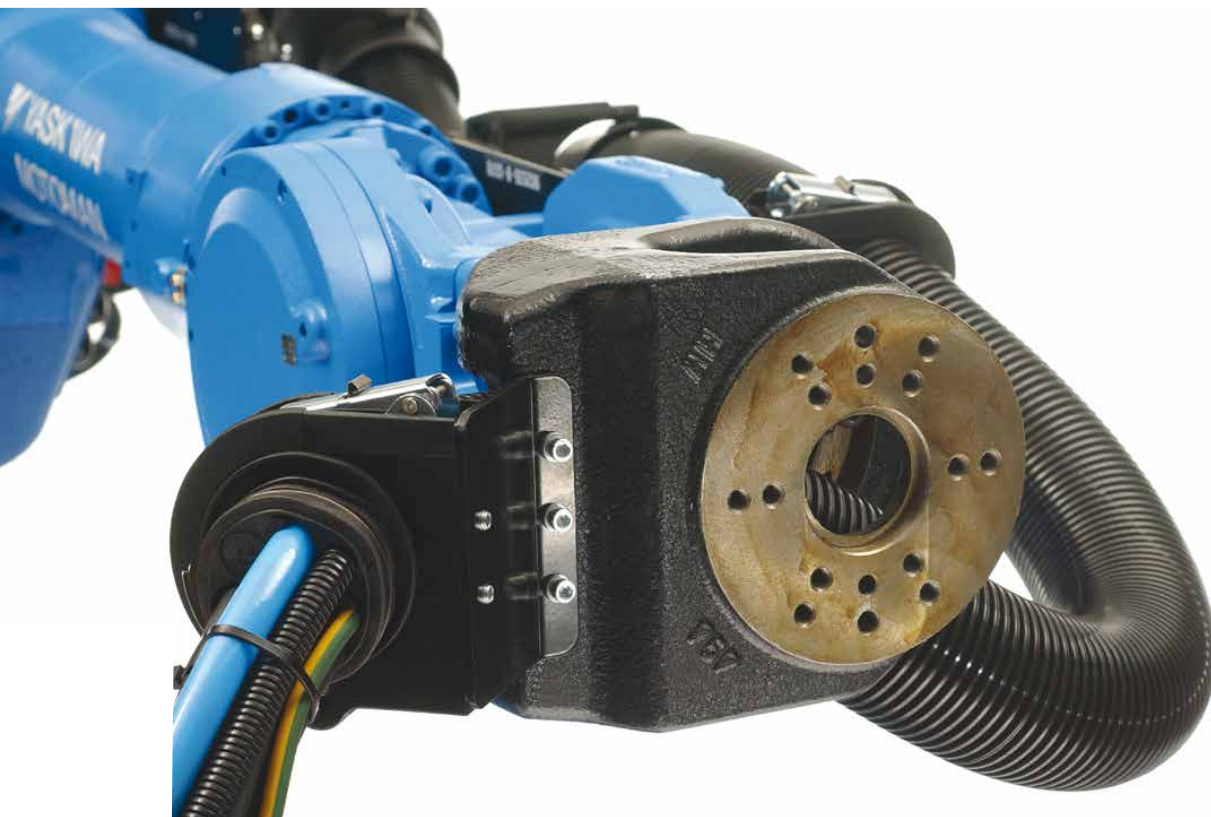
Type	Order no.	Material	Colour	PU pce.	Remarks
Clamping clip					
Clamping clip D50	902798	Steel	Black	1	powder-coated
Clamping clip D63	902294	Steel	Black	1	powder-coated
Clamping clip D100 with tube D34	941470	Steel	Black	1	powder-coated
Clamping clip D115 with tube D34	941098	Steel	Black	1	powder-coated
Clamping clip D125 with tube D34	902149	Steel	Black	1	powder-coated
Clamping clip D160 with tube D34	941104	Steel	Black	1	angled 20°, powder-coated
Clamping clip D190 with tube D34	941097	Steel	Black	1	powder-coated
Clamping clip D200 with tube D34	941090	Steel	Black	1	angled 20°, powder-coated
Clamping clip D250 with tube D34	941089	Steel	Black	1	powder-coated
Pipe clamping piece					
FLR 34/32	941472	Alu	natural	1	
Adapter plate					
Adapter plate	941471	Alu	natural	1	

Protector

The protectors protect the dresspack against impacts and abrasion, which significantly increases the service life of the dresspacks.



Type	Order no.	Material	Colour	PU pce.	Remarks
Protector, NW 23, bk	902229	PA	Black	1	
Protector, NW 29, bk	902010	PA	Black	1	
Protector, NW 36, bk	902232	PA	Black	1	
Protector, NW 52, bk	902234	PA	Black	1	
Protector, NW 70, bk	902235	PA	Black	1	



Hose and spring guide

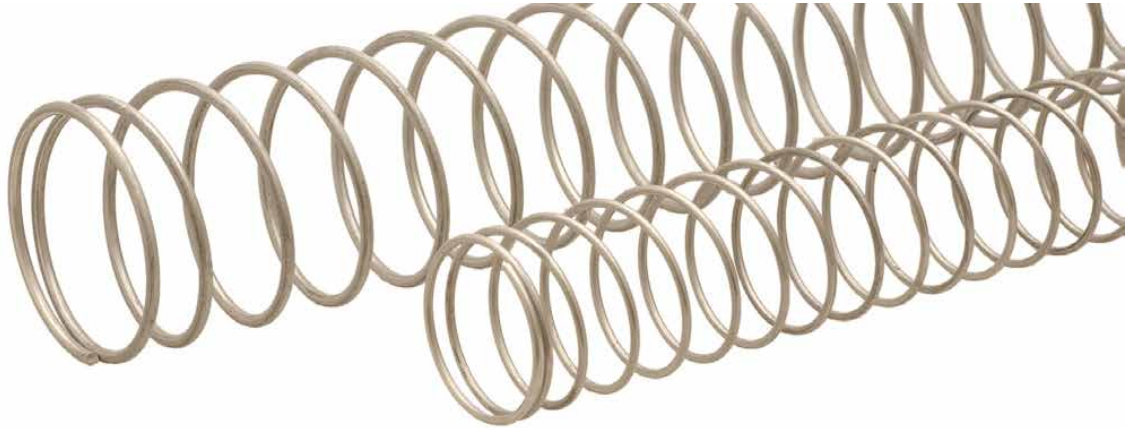
The protectors protect the dresspack against impacts and abrasion, which significantly increases the service life of the dresspacks.



Type	Order no.	Material	Colour	PU pce.	Remarks
Spring holder, NW 23/29	942001	PA	Black	1	matching clamping clip; NW 29K / 902001
Spring holder, NW 36/36	940628	PA	Black	1	matching clamping clip; NW 36S / 940626
Spring holder, NW 36/52	902016	PA	Black	1	matching clamping clip; NW 52M / 902205
Sliding jaws; NW 52	902219	PA	Black	1	matching clamping clip; NW 52M / 902205
Sliding jaws; NW 70	902220	PA	Black	1	matching clamping clip; NW 70M / 902207
Flared jaw; NW 70	902226	PA	Black	1	matching rotating fork; NW 70 / 902224
Flared jaw; NW 70	902227	PA	Black	1	matching rotating fork; NW 70 / 902224
Spring holder NW70	942000	PA	Black	1	matching clamping clip; NW 70M / 902207
Rotating fork with rotating flange					
Rotating flange NW 70	902252	PA	Black	1	
Rotating fork; NW 70	902224	PA	Black	1	

Compression spring

Compression springs for all available nominal widths in various levels of hardness and lengths. This allows an individual response to the fill level of the dresspack.



Type	Order no.	Material	Colour	PU pce.	Remarks
Compression spring 23	902539	Spring steel	natural	1	Size: 400, classification: light matching: Spring holder, NW 23/29 / 942001
Compression spring 23	902559	Spring steel	natural	1	Size: 600, classification: light matching: Spring holder, NW 23/29 / 942001
Compression spring 29	902367	Spring steel	natural	1	Size: 410, classification: light matching: Spring holder, NW 23/29 / 942001
Compression spring 29	940609	Spring steel	natural	1	Size: 400, classification: light matching: Spring holder, NW 36/36 / 940628
Compression spring 29	940610	Spring steel	natural	1	Size: 600, classification: medium matching: Spring holder, NW 36/36 / 940628
Compression spring 36	902540	Spring steel	natural	1	Size: 400, classification: light matching: Spring holder, NW 36/52 / 902016
Compression spring 36	902375	Spring steel	natural	1	Size: 400, classification: medium matching: Spring holder, NW 36/52 / 902016
Compression spring 36	940611	Spring steel	natural	1	Size: 600, classification: medium matching: Spring holder, NW 36/36 / 940628
Compression spring 52	902371	Spring steel	natural	1	Size: 450, classification: light matching: Spring flared section; NW 70 / 902227 or spring holder NW70 / 942000
Compression spring 52	902374	Spring steel	natural	1	Size: 1000, classification: medium matching: Spring flared section; NW 70 / 902227 or spring holder NW70 / 942000
Compression spring 52	902369	Spring steel	natural	1	Size: 1000, classification: reinforced matching: Spring flared section; NW 70 / 902227 or spring holder NW70 / 942000

Compression spring

Compression spring 70	940213	Spring steel	natural	1	Size: 450 classification: medium, matching: Spring flared section; NW 70 / 902227 or spring holder NW70 / 942000
Compression spring 70	902124	Spring steel	natural	1	Size: 550 classification: medium, matching: Spring flared section; NW 70 / 902227 or spring holder NW70 / 942000
Compression spring 70	902370	Spring steel	natural	1	Size: 1000, classification: medium, matching: Spring flared section; NW 70 / 902227 or spring holder NW70 / 942000
Compression spring 70	902379	Spring steel	natural	1	Size: 1000, classification: reinforced matching: Spring flared section; NW 70 / 902227 or spring holder NW70 / 942000



Cable sheath

Cable protection conduit made from PUR and polyamide. Extremely flexible, resistant to impacts and notches, suitable for all robot applications.



Type	Order no.	Material	Colour	Ø inside mm	Ø outside mm	Bending radius static	Bending radius dynamic	PU pce.
PU corrugated tube, NW 23G standard	99764	PU	Black	21.5	28.3	40	100	On request
PU corrugated tube, NW 29G standard	99765	PU	Black	28.2	34.4	50	120	On request
PU corrugated tube, NW 36G standard	99767	PU	Black	35.0	42.5	60	180	On request
PU corrugated tube, NW 52G standard	99770	PU	Black	52.8	62.2	150	300	On request
PU corrugated tube, NW 52G reinforced	942004	PU	Black	52.0	62.2	150	300	On request
PA corrugated tube, NW 52G	902127	PA	Black	52.0	62.8	125	300	On request
PU corrugated tube, NW 70G standard	99771	PU	Black	70.0	82.6	150	350	On request
PU corrugated tube, NW 70G reinforced	940997	PU	Black	68.6	82.6	170	400	On request
PA corrugated tube, NW 70G	902013	PA	Black	70.0	82.5	150	350	On request