

Pipe system and point of use





AlRnet 15-28mm range



Polyamide pipe diameter 15-28mm in rolls or in pipe length Aluminum pipe 15-28mm

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Stainless steel click-fit connectors, with integrated retaining claws acting as a force lock for pipe retaining

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Compressed air outlet compatible with AIRnet system, and compatible with outlet couplers

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Hoses and workshop connection and extension to connect to your point of us, fits different requirements

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For all connections on tools, hoses and machines, from the simple nipple to the more complex safety quick-action coupling.

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Filters and maintenance units – from prefilters and microfilters through to activated carbon filters

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Aluminum pipe from 20(3/4') to 158mm (6')



Range fitting from Push – to-fit, torque-to-grip, or bolt clamp assembly system

Consult the AIRNet entire range, including larger installation solutions for heavy duty industrial systems for compressed air and vacuum.

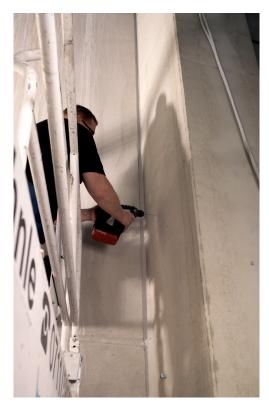
Preventing your money from vanishing into thin air: pipe systems of AlRnet!



Maximum efficiency in pipe network

An efficient compressed air system must include a well designed pipe network because a correctly designed pipe system minimises the pressure lost from the line.

We would be glad to help you design your pipe system: We will design the perfect pipe system and appropriate connection points for you based on your individual requirements analysis for maximum efficiency – always with consideration for the long-term future development of your company.



Optimisation of existing pipe systems

Leaks in the pipe system can generate high costs: In smaller industry and trade networks the average leak is 5%, in larger networks it may even be $10\text{-}15\%^*$ (based on consumption during production times).

Additio	Additional costs resulting from leaks*								
ø leak	Air loss Energy loss/year at 6 bar at 8.760 h/a and 0,19 €/kWh								
[mm]	at 6 bar (l/sec.)	at 8.760 h/a [kWh]	and 0,19 €/kWh [€]						
1	1.24	2,891	549.29						
3	11.14	26,017	4.943.23						
5	30.95	72,270	13,731.30						

^{*} Source: Bavarian Environmental Protection Agency (Hrsg.): "Protect the climate – Reduce costs: Guideline for efficient energy use in trade and industry", 1st edition, Augsburg, 2004



Calculate your pipeline diameter!

To plan a compressed air pipeline correctly, greatest importance should be attached to the dimensions and the materials selected because selecting small cross-sections and compressed air pipelines susceptible to corrosion can result in high pressure losses.

The perfect pipe system in four steps:

- 1. Select the right pipe system according to your compressed air requirements See the previous page for the four different materials available.
- 2. Choose a ring or stub line depending on your space requirements:

A stub line is suitable for individual compressed air outlets and for bridging small distances. If you intend to install several compressed air outlets on different sides of the room, a ring line is recommended because the same pressure is guaranteed at all connection points in the network.

Refer to the tables on the following page for:

- the dimensions of a **stub line**: the total nominal length of the line and the total compressed air requirements
- the dimensions of a **ring line**: half the nominal length of the line and the total compressed air requirements
- 3. Select the fittings required for your pipeline:

For flowing compressed air every fitting is a resistance, a substitute pipeline length must be included for each fitting accordingly. These lengths can be taken from the table on the following page. When choosing the fittings, consider the pipeline diameter already calculated in point 2.

Example: Substitute pipe length Nominal length

Total		13.4 m
5 T-pieces ø 28 mm	2.0 m	10.0 m
2 angles ø 28 mm	1.5 m	3.0 m

4. Calculate your pipeline diameter:

Add the nominal length of the pipeline from point 2 and the substitute length for fittings from point 3 to get the total length. With this length you can take the correct pipeline diameter for your personal requirements from the tables on the following pages.

Design data for pipelines

Substitute pipeline lengths for fittings

Working overpressure 7 bar, Δ p (max.) 0.2 bar, flow speed (max.) 10 m/s

Fittings	Comparable with	3/8"	1/2"	3/4"	1"	11/4"	11/4"	11/2"	11/2"	2"	2 1/2"
Dia.	inner	12	14	18	24	28	32	38	38	50	63
Dia.	outer	15	18	22	28	32	40	40	50	63	80
Ball valve		0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.6	0.7	0.8
Angle 45°		0.4	0.5	0.7	0.7	1.0	1.0	1.3	1.3	1.8	2.0
Angle 90°		0.7	1.0	1.3	1.5	2.0	2.0	2.5	2.5	3.5	4.0
T-piece		0.8	1.0	1.5	2.0	2.5	2.5	3.0	3.0	4.0	5.0
Reduction fitting 2d to d		0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.8	1.0	1.5

Compressed air distribution with closed ring line

For dimensioning the ring line, take half of the nominal length of the total ring line and the entire compressed air requirements into consideration:



A B C

H
D E F

Design data for pipelines

Polyamide (PA) pipe/plug-in system 15-28 mm Working overpressure 7 bar, Δ p (max.) 0.2 bar, flow speed (max.) 10 m/s

е	Length of the pipeline [m]														
rate	N[I/s]	N[I/min]	N[m³/min]	25	50	75	100	150	200	250	300	400	500	750	1.000
>	1,7	100	0,1	15	15	15	15	15	15	15	15	18	18	18	22
Q	3,3	200	0,2	15	15	15	15	18	18	22	22	22	22	22	28
ai	5,0	300	0,3	15	15	18	18	22	22	22	22	28	28	28	28
~	6,7	400	0,4	15	18	22	22	22	22	28	28	28	28	28	>28
esse	8,3	500	0,5	18	22	22	22	22	28	28	28	28	28	>28	>28
_	12,5	750	0,8	22	22	22	28	28	28	28	>28	>28	>28	>28	>28
료	16,7	1.000	1,0	22	28	28	28	28	>28	>28	>28	>28	>28	>28	>28
Som	25,0	1.500	1,5	28	28	28	>28	>28	>28	>28	>28	>28	>28	>28	>28
	33,3	2.000	2,0	28	>28	>28	>28	>28	>28	>28	>28	>28	>28	>28	>28

Diameter > 28 mm - see AlRnet PF/Black series

Aluminium pipe/plug-in system 15-28 mm Working overpressure 7 bar, Δ p (max.) 0.2 bar, flow speed (max.) 10 m/s

	Length of the pipeline [m]														
rate	N[I/s]	N[I/min]	N[m³/min]	25	50	75	100	150	200	250	300	400	500	750	1.000
2	1,7	100	0,1	15	15	15	15	15	15	15	15	18	18	18	18
M	3,3	200	0,2	15	15	15	15	18	18	18	18	22	22	22	28
Ē	5,0	300	0,3	15	15	18	18	18	22	22	22	28	28	28	28
air	6,7	400	0,4	15	18	18	22	22	22	28	28	28	28	28	>28
ed	8,3	500	0,5	18	18	22	22	22	28	28	28	28	28	>28	>28
Compress	12,5	750	0,8	18	22	22	28	28	28	28	28	>28	>28	>28	>28
E E	16,7	1.000	1,0	22	28	28	28	28	>28	>28	>28	>28	>28	>28	>28
E	25,0	1.500	1,5	28	28	28	>28	>28	>28	>28	>28	>28	>28	>28	>28
చ	33,3	2.000	2,0	28	28	>28	>28	>28	>28	>28	>28	>28	>28	>28	>28
	50,0	3.000	3,0	28	>28	>28	>28	>28	>28	>28	>28	>28	>28	>28	>28

Diameter > 28 mm - see AlRnet PF/Black series

Aluminium pipe/AIRnet 20-158 mm

Working overpressure 7 bar, Δ p (max.) 0.2 bar, flow speed (max.) 10 m/s

	Length of the pipeline [m]												
	N[I/s]	N[I/min]	N[m³/min]	50	100	150	300	500	750	1.000	1.300	1.600	2.000
	3	200	0,2	20	20	20	20	20	20	20	20	20	25
	8	500	0,5	20	20	20	25	25	25	40	40	40	40
	14	800	0,8	20	20	25	25	40	40	40	40	40	40
	19	1.200	1,2	20	25	25	40	40	40	40	40	40	40
	28	1.700	1,7	25	25	40	40	40	40	40	50	50	50
	42	2.500	2,5	25	40	40	40	40	50	50	50	50	63
ate	69	4.000	4	40	40	40	50	50	63	63	63	63	63
<u>=</u>	97	6.000	6	40	40	50	50	63	63	63	80	80	80
air flow rate	139	8.000	8	40	50	50	63	63	80	80	80	80	100
<u></u>	208	13.000	13	50	63	63	63	80	80	100	100	100	100
	278	17.000	17	50	63	63	80	80	100	100	100	100	158
ed	347	21.000	21	63	63	80	80	100	100	100	158	158	158
Compressed	417	25.000	25	63	80	80	100	100	100	158	158	158	158
直	486	29.000	29	63	80	80	100	100	158	158	158	158	158
틍	556	33.000	33	63	80	80	100	158	158	158	158	158	158
చ	694	42.000	42	80	80	100	158	158	158	158	158	158	158
	833	50.000	50	80	100	100	158	158	158	158	158	158	158
	972	58.000	58	80	100	100	158	158	158	158	158	200	200
	1.111	67.000	67	100	100	158	158	158	158	158	200	200	200
	1.250	75.000	75	100	158	158	158	158	158	200	200	200	200
	1.389	83.000	83	100	158	158	158	158	158	200	200	200	200
	1.528	92.000	92	100	158	158	158	158	200	200	200	200	200
	1.667	100.000	100	100	158	158	158	158	200	200	200	200	200

Diameter > 158 mm not in supply range



Socket system 15-28 mm

Laid, extended and modified in an instant



For small and medium-sized workshops: Lay pipelines quickly and easily with a few hand movements with the AIRnet pipe system and extend or modify existing pipelines – the flexible plug-in system offers a wide selection of different connectors.

Click it – the innovative pipe system

Hardly any other pipe system is changed as often as a compressed air network: No problem with the "Click it" system: The connection can be detached easily with only a few hand movements and without causing damage to the pipe or connector. All parts can then be reused.



1. Cut the pipe to the right size

Accurate to the millimetre using the Schneider airsystems pipe shears.



2. Deburr and chamfer

So that everything runs smoothly and fits together, visually and otherwise.



3. Join the pipes using plug connectors

When inserted as far as the stop, the pipe is completely airtight and the simple installation saves an enormous amount of time.

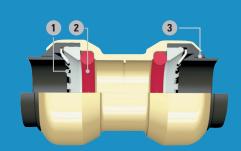


4. Disassembly with just a few hand movements

Press clip against connector – pull pipe out of connector – and you're done.

The Click-it plug connectors

- 1) The stainless steel retaining claw provides a force lock for retaining the pipe securely
- 2 | Oil-resistant O-ring for complete impermeability, even with oil containing compressed air
- 3 | Spacer washer for centring the pipe in the fitting exactly





Polyamide pipes



- Polyamide (PA) for greater flexibility
- Pipe shears cut pipelines to length in a single cut
- Free of silicone Black UV-resistant pipes, suitable for outdoor installation

					Syste	em/dia.			Packaging
	Designation	Model	Art. no.	15	18	22	28	Length (m)	unit (pc.)
		PA Pipe D15 25m	2813110000		·	,	'	25	1
		PA Pipe D18 25m	2813210000					25	1
	D. H. J	PA Pipe D22 25m	2813310000					25	1
	Rolled pipe, grey 1)	PA Pipe D28 25m	2813410000					25	1
		PA Pipe D15 10m	2813120000					10	1
		PA Pipe D18 10m	2813220000					10	1
		PA Pipe D15 5,7m	2813100000					6	1
		PA Pipe D18 5,7m	2813200000					6	1
	Lengths of pipe, grey 2)	PA Pipe D22 5,7m	2813300000					6	1
		PA Pipe D28 5,7m	2813400000					6	1
		PA UV Pipe D15 25m	2813130000					25	1
	Rolled pipe, black 1)	PA UV Pipe D18 25m	2813230000					25	1
		PA UV Pipe D22 25m	2813330000					25	1
Ans.	Lengths of pipe, black 2)	PA UV Pipe D22 5,7m	2813320000					6	1

- 1) Max. operating pressure for rolled pipe: 14 bar at -20 °C to \le +20 °C; 11 bar at +20 °C to \le +50 °C 2) Max. operating pressure for lengths of pipe: 16 bar at -20 °C to \le +20 °C; 11 bar at +20 °C to \le +50 °C

Socket system 15-28 mm

Click-it brass plug connector

- Simple, quick assembly for huge time savings
- Flexible system for simple release and reconnection
- Resistant O-ring made from NBR ensures complete impermeability, even if the air contains oil
- Large number of stainless steel retaining claws hold the pipe securely in the plug connectors

•	Material: Brass
•	Free of silicone
•	Max. operating pressure: 16 bar at -20 °C to ≤ +50 °C



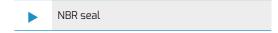
		System	/dia.			Packaging		
Model	Art. no.	15	18	22	28	unit (pc.)	Designation	
Nipple socket D15 1/2 ISO7R m	2813101780					1		
Nipple socket D18 3/4 ISO7R m	2813211780					1		mmin de
Nipple socket D18 1/2 ISO7R m	2813201780					1		James Hill
Nipple socket D22 3/4 ISO7R m	2813311780					1	Straight male push-in connexion	Marie de la Constitución de la C
Nipple socket D22 1/2 ISO7R m	2813301780					1		
Nipple socket D28 1 ISO7R m	2813421780					1		
Nipple socket D15 1/2 ISO228 f	2813101980					1		
Nipple socket D18 1/2 ISO228 f	2813201980					1		
Nipple socket D18 3/4 ISO228 f	2813211980					1		
Nipple socket D22 1/2 ISO228 f	2813301980					1	Straight female push-in connexion	
Nipple socket D22 3/4 ISO228 f	2813311980					1		
Nipple socket D28 1 ISO228 f	2813421980					1		
Equal socket D15	2813100280					1		
Equal socket D18	2813200280					1		
Equal socket D22	2813300280					1	Straight push-in connexion	
Equal socket D28	2813400280					1		
19 Deg Elbow D15	2813100380				_	1		
10 Deg Elbow D18	2813100380					1		
-	2813300380		_			1	Right-angle plug connector 90°	
10 Deg Elbow D22						1		Sup.
10 Deg Elbow D28	2813400380				_	1		
IS Deg Elbow D15	2813100480					1		
IS Deg Elbow D18	2813200480		-			1	Angle plug connector 45°	
IS Deg Elbow D22	2813300480					1		
15 Deg Elbow D28	2813400480				•	1		
00 Deg Elbow D15-1/2 ISO7R m	2813100381	•				1		
10 Deg Elbow D18-1/2 ISO7R m	2813200381		-				Angle male push-in connexion	
0 Deg Elbow D22-3/4 ISO7R m	2813310381					1		
10 Deg Elbow D28-1 ISO7R m	2813420381				•	1		
Equal tee D15	2813100580	•	_			1		
Equal tee D18	2813200580			_		1		_
Equal tee D22	2813300580			•	_	1		
equal tee D28	2813400580					1	Through much in accommission	
Reduction tee D22 D15 D22	2813310780	•	_			1	T-branch push-in connexion	
Reduction tee D22 D18 D22	2813320780					1		
Reduction tee D28 D22 D22	2813430781		_	•		1		
Reduction tee D28 D18 D28	2813420780		•			1		
Reduction tee D28 D22 D28	2813430780					1		
Pipe end adapter D22-D15	2813316280	•				1		
Pipe end adapter D22-D18	2813326280		•			1	Reducing push-in connexion	
Pipe end adapter D28-D18	2813426280					1	0 ,	
Pipe end adapter D28-D22	2813436280					1		
Bliding equal socket D15	2813100281	•				1		
Sliding equal socket D18	2813200281		•			1	Sliding sleeve	
Gliding equal socket D22	2813300281					1	Sinding Sieeve	
Sliding equal socket D28	2813400281				•	1		
End cap D15	2813100680	•				1		
End cap D18	2813200680		•			1	Blind cap	
End cap D22	2813300680					1	Silia dap	The same of the sa
End cap D28	2813400680					1		
Threaded ad. D15-1/2 ISO7R m	2813101300	•				1		
Threaded ad. D18-1/2 ISO7R m	2813201300					1	Connecting adapter	
Threaded ad. D18-3/4 ISO7R m	2813211300					1	Please note: it is mandatory to insert	
Threaded ad. D22-1/2 ISO7R m	2813301300					1	a notch into the connecting piece with	
Threaded ad. D22-3/4 ISO7R m	2813311300					1	the all-purpose tool 2813024000!	
Threaded ad. D28-1 ISO7R m	2813421300					1	1	



Air shut-off cock



- Simple shut-off function ensures a high degree of energy efficiency and safety of the supply network
- For shutting off individual areas of a stub, ring or outlet line
- Plug connector not preassembled





		System/di	a.			
Model	Art. no.	15	18	22	28	
Ball valve D15 1)	2813105180	•			'	
Ball valve D18 1)	2813205180					
Ball valve D22 1)	2813305180					
Ball valve D28 1)	2813405180					

¹⁾ Max. operating pressure: 16 bar at -20 °C to \leq +50 °C

Assembly aids

				Syster	n/dia.			Support	
	Designation	Model	Art. no.	15	18	22	28	(mm)	Packaging unit (pc.)
4 4		Pipe clip D15	2813102200						25
		Pipe clip D18	2813202200						25
	Pipe clips	Pipe clip D22	2813302200						25
		Pipe clip D28	2813402200						25
		Pipe clamp D15-D18	2813122200						25
	Pipe clamps	Pipe clamp D22	2813332200						25
		Pipe clamp D28	2813442200						25
		Hanger bolt for pipe clamps	2813002200						25
STATE SAME	Hanger bolt for pipe clamps								
		Disassembly pliers D15	2813102800						1
		Disassembly pliers D18	2813202800						1
	Disassembly pliers	Disassembly pliers D22	2813302800						1
		Disassembly pliers D28	2813402800						1
		Disassembly clip D15	2813112800						1
		Disassembly clip D18	2813222800		•				1
	Disassembly clip	Disassembly clip D22	2813332800						1
		Disassembly clip D28	2813442800						1

Socket system 15-28 mm

Marking and deburring tool

 For chamfering and deburring aluminium pipes, marking insertion depths and notching indentations on hard surfaces (e.g. V4A pipelines)

Marking and deburring tool	2813024000
Model	Art. no.



Shear

- For cutting PA pipes, max. dia. 28 mm (with reversible blade)
- With impact function

Model	Art. no.
Shear	2813004000
2 spare blades shear	2813014000



Pipe cutter

■ For aluminium and stainless steel pipes, dia. 15-32 mm

Model	Art. no.
Pipe Cutter D32	2813034000
Pipe Cutter D32 cutting wheel	2813044000



Deburring tool

- For deburring plastic, aluminium and stainless steel pipes
- For inner and outer diameters up to 35 mm

	Deburring tool D35	2813054000
	Model	Art. no.
П		



Deburring blade

 For deburring the inner diameter of aluminium pipes

Deburring blade	2813064000
Model	Art. no.



Anti-friction agent

- For easy installation of compressed air pipes
- Free of silicone

Model	Art. no.
Anti-friction agent	2813074000





Pipe sockets 15-22 mm

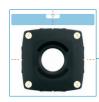
Innovative and flexible – for greater economic efficiency



Extremely durable body made of impactresistant, glass-fibre reinforced polyamide



Very flexible, can be used as an input block, through block, distribution block or dead-end distribution block



Uncomplicated assembly because the screens of the Basic sockets also serve as drilling templates and spirit level supports



Wanel 3

Great flexibility with top sockets available in three different versions



Protection of lines as the air outlet is directed downwards to avoid bending hoses

Example: Socket Box 2x1/2 and Socket Box Top 4x1/2

Install perfect compressed air outlets in the pipe system for each workplace – versatile pipe sockets are fully compatible with the Schneider airsystems pipe system and various attachment parts, and can be extended by fitting additional outlet components.

A flexible system with unimagined possibilities



Model overview:



Model	Art. no.	Outlets	Thread
Socket Box 2x1/2	2813002580	2	1/2"
Socket Box 3x1/2	2813002581	3	1/2"
Socket Box 4x1/2	2813002582	4	1/2"
Socket Box 6x1/2	2813002583	6	1/2"
Socket Box Alu 4x3/4 - 1/2	2813002505	4/1	1"/1/2"
Socket Box Top 2x1/2	2813002680	2	1/2"
Socket Box Top 3x1/2	2813002681	3	1/2"
Socket Box Top 4x1/2	2813002682	4	1/2"

Five basis sockets with two to six air outlets can be combined with three top sockets with two to four outlets.

If one basis socket is initially sufficient, the screen included in the delivery is clipped onto it. If your socket requirements increase, the system can be extended at any time by adding a top socket without having to disassemble the basis socket.

Further pipe sockets can be connected without any problem at the side via a short pipeline or a double nipple. If an outlet is no longer needed, simply lock it with a locking screw.



Midi System for restricted spatial conditions. With TÜV certificate.

Midi pipe sockets

Assemble the pipe sockets exactly as you need them.

Basic sockets are available for each system. These can then be individually fitted with the required outflows and elements.

This section explains the designation of the inflows and outflows for the Midi pipe sockets:



Midi pipe sockets



 Extremely versatile, with input blocks, through blocks and dead-end distribution blocks

•	For wall and ceiling mounting
•	Max. operating pressure: 16 bar at -20 °C to ≤ +50 °C

Designation	Model	Art. no.
Midi dead-end distribution block	Socket Box Mini 3/8 - 1/2	2813002700
	Socket Box Mini 2x3/8 - 1/2	2813002701
	Socket Box Mini 3/8 - 2x1/2	2813002702

Pipe sockets

Basic pipe sockets

 Basic sockets with integrated plug connectors for simple connection of the pipeline

•	For wall and ceiling mounting
•	Including removable screen, which can be used as a drilling template
•	Max. operating pressure: 16 bar at -20 °C to ≤ +50 °C



Model	Art. no.	Designation			
Socket Box 2x1/2	2813002580				
Socket Box 3x1/2	2813002581	Basic pipe socket G1/2"i			
Socket Box 4x1/2	2813002582	dimensions without screen LxWxH: 85x85x45 mm, with screen 48 mm high			
Socket Box 6x1/2	2813002583	Will boroom to min mgm			
Socket Box Alu 4x3/4 – 1/2	2813002505		CONFT.		
		Basic pipe socket G1"	VISIN		
		Dimensions LxWxH: 90x90x53 mm			

Top pipe sockets

■ Exclusively for fitting to a Basic socket

Top socket including fastening material and sealing

Max. operating pressure:
16 bar at -20 °C to ≤ +50 °C



Model	Art. no.	Designation	
Socket Box Top 2x1/2	2813002680		NSPART
Socket Box Top 3x1/2	2813002681		
			0
Socket Box Top 4x1/2	2813002682	Pipe socket Top G1/2"	Wilhat
			(S) (S)
			0



Hoses and workshop equipment For a perfectly organised workplace



For private use and professional workshop applications – hard-wearing fabric hoses, flexible Super-Flex hoses or durable polyurethane hoses for every application. For optimal workplace organisation and ergonomic work - hose rewinders, power and air supply units and tractions.

Air hoses

PVC hose with fabric inlay

 Particularly resistant against compressed air containing oil

Max. operating pressure 15 bar at 20 °C

Model	Art. no.	With quick-action cou- pling and plug nipple	Max. pres- sure (bar)	Outer dia. (mm)	Inside dia. (mm)	Length (m)
H PVC-QRC-E-15bar 11-6/5m	2813930000	EURO profile	15	11	6	5
H PVC-QRC-U-15bar 11-6/5m	2813930005	UNIVERSAL profile	15	11	6	5
H PVC-QRC-E-15bar 11-6/10m	2813930001	EURO profile	15	11	6	10
H PVC-QRC-U-15bar 11-6/10m	2813930006	UNIVERSAL profile	15	11	6	10
H PVC-15bar 11-6/25m	2813930015		15	11	6	25
H PVC-15bar 11-6/50m	2813930016		15	11	6	50
H PVC-QRC-E-15bar 15-9/5m	2813930002	EURO profile	15	15	9	5
H PVC-QRC-U-15bar 15-9/5m	2813930007	UNIVERSAL profile	15	15	9	5
H PVC-QRC-E-15bar 15-9/10m	2813930003	EURO profile	15	15	9	10
H PVC-QRC-U-15bar 15-9/10m	2813930008	UNIVERSAL profile	15	15	9	10
H PVC-15bar 15-9/25m	2813930017		15	15	9	25
H PVC-15bar 15-9/50m	2813930018		15	15	9	50
H PVC-QRC-E-15bar 18-13/10m	2813930004	EURO profile	15	18	13	10
H PVC-QRC-U-15bar 18-13/10m	2813930009	UNIVERSAL profile	15	18	13	10
H PVC-15bar 18-13/25m	2813930019		15	18	13	25
H PVC-15bar 18-13/50m	2813930020		15	18	13	50
H PVC-QRC-E-OR-15bar 15-9/10m	2813930010	EURO profile	15	15	9	10
H PVC-OR-15bar 15-9/25m	2813930021		15	15	9	25



Fig. 2813930003



Fig. 2813930010 "oil-resistant"

Super-Flex hose

- Reinforced external material for greater resistance to ageing and protection against compressed air containing oil
- Extremely flexible, even at low temperatures

•	PVC hose with fabric inlay
•	Max. operating pressure 15 bar at 20 °C

Model	Art. no.	With quick-action cou- pling and plug nipple	Max. pres- sure (bar)	Outer dia. (mm)	Inside dia. (mm)	Length (m)
H PVC-QRC-E-SF-15bar 11-6/5m	2813930011	EURO profile	15	11	6,3	5
H PVC-QRC-E-SF-15bar 11-6/10m	2813930012	EURO profile	15	11	6,3	10
H PVC-SF-15bar 11-6/25m	2813930022		15	11	6,3	25
H PVC-SF-15bar 11-6/50m	2813930023		15	11	6,3	50
H PVC-QRC-E-SF-15bar 15-10/5m	2813930013	EURO profile	15	15,5	10	5
H PVC-QRC-E-SF-15bar 15-10/10m	2813930014	EURO profile	15	15,5	10	10
H PVC-SF-15bar 15-10/25m	2813930024		15	15,5	10	25
H PVC-SF-15bar 15-10/50m	2813930025		15	15,5	10	50
H PVC-SF-15bar 19-13/25m	2813930026		15	19	12,7	25
H PVC-SF-15bar 19-13/50m	2813930027		15	19	12,7	50
H PVC-SF-15bar 27-19/25m	2813930028		15	27	19	25
H PVC-SF-15bar 27-19/50m	2813930029		15	27	19	50



Fig. 2813930014

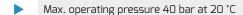


Fig. 2813930023

High-pressure hose version

- High-pressure version for pressure up to 40 bar
- Particularly suitable for connecting pneumatic tools outdoors
- Extremely flexible, even at low temperatures
- For temperature range from -15 °C to +60 °C

•	PVC hose with reinforced polyester threads, smooth hose core and UV- resistant outer lining



Model	Art. no.	Max. pressure (bar)	Outer dia. (mm)	Inside dia. (mm)	Length (m)
H PVC-SF-40bar 16-9/50m	2813930030	40	16	9	50
H PVC-SF-40bar 21-13/50m	2813930031	40	21	13	50





Polyamide spiral hose



- With rotary quick-action coupling (only QRC) and plug nipple, ready for immediate use
- Bend protection at the spiral hose ends for an extended service life and constant air flow
- Particularly suitable for tractions due to high reset force

Connections with swivel joints (except 2813940000)

Model	Art. no.	With quick-action coupling and plug nipple	Max. pressure (bar)	Outer dia. (mm)	Inside dia. (mm)	Working length (m)	Stretched length (m)
SH PA-QRC-E-8bar 8-6/5m	2813940000	EURO profile	8	8	6	2,5	5
SH PA-QRC-E-8bar 8-6/7,5m	2813940001	EURO profile	8	8	6	4	7,5
SH PA-QRC-E-8bar 8-6/15m	2813940002	EURO profile	8	8	6	8	15
SH PA-QRC-U-8bar 8-6/5m	2813940004	UNIVERSAL profile	8	8	6	2,5	5
SH PA-QRC-U-8bar 8-6/10m	2813940005	UNIVERSAL profile	8	8	6	6	7,5
SH PA-QRC-U-8bar 8-6/15m	2813940006	UNIVERSAL profile	8	8	6	8	15
SH PA-BJ-8bar 8-6/5m	2813940007	BAYONET profile	8	8	6	2,5	5
SH PA-BJ-8bar 8-6/10m	2813940008	BAYONET profile	8	8	6	6	7,5
SH PA-BJ-8bar 8-6/15m	2813940009	BAYONET profile	8	8	6	8	15
SH PA-QRC-E-8bar 10-8/10m	2813940003	EURO profile	8	10	8	6	10

Polyurethane spiral hose



- With rotary quick-action coupling (only SSL-SK) and plug nipple, ready for immediate use
- Bend protection at the spiral hose ends for an extended service life and constant air flow
- Small winding diameter saves space
- Particularly abrasion-resistant and very resilient
- No remaining cross-section reductions upon bending

Connections with swivel joints

Model	Art. no.	With quick-action coupling and plug nipple	Max. pressure (bar)	Outer dia. (mm)	Inside dia. (mm)	Working length (m)	Stretched length (m)
SH PUR-QRC-E-8bar 10-6,5/6m	2813940010	EURO profile	8	10	6,5	4,8	6
SH PUR-QRC-E-8bar 10-6,5/7,5m	2813940011	EURO profile	8	10	6,5	6	7,5
SH PUR-8bar 10-6,5/7,5m	2813940014		8	10	6,5	6	7,5
SH PUR-QRC-E-8bar 12-8/6m	2813940012	EURO profile	8	12	8	4,8	6
SH PUR-QRC-E-8bar 12-8/7,5m	2813940013	EURO profile	8	12	8	6	7,5
SH PUR-8bar 12-8/7,5m	2813940015		8	12	8	6	7,5
SH PUR-8bar 16-10/5m	2813940016		8	16	10	2,5	5
SH PUR-8bar 16-10/10m	2813940017		8	16	10	6	10

Workshop equipment

Traction

- For all types of portable devices and tools
- Fully fitted with safety cable, terminal block and snap hook
- High degree of flexibility because the spring tension on the housing can be used to set and adjust the required load capacity

•	Compact, with robust aluminium housing
•	Rubber buffer at the end

Model	Art. no.	Carrying power (kg)	Stroke length (m)	Weight (kg)
EQ SST-0,4-1,0kg	2813960000	1	1.6	0.63
EQ SST-1,0-2,0kg	2813960001	2	1.6	0.67
EQ SST-2,0-3,0kg	2813960002	3	1.6	0.79
EQ SST-2,0-4,0kg	2813960003	4	2.5	2.85
EQ SST-4,0-6,0kg	2813960004	6	2.5	3
EQ SST-6,0-8,0kg	2813960005	8	2.5	3.1



Hose rewinder, automatic

- With durable rolling mechanism for daily use in trade and the industry
- Fully fitted with quick-action coupling and long connection hose with plug nipple, ready to connect
- Flexible use with large swivel range
- Wall mounting

•	Abrasion-resistant, flexible air hose with antikink spring and hose locking device
•	Locking function can be deactivated
•	Plastic housing



Model	Art. no.	Max. pres- sure (bar)	Outer dia. (mm)	Inside dia. (mm)	Extendable length (m)	Weight (kg)
HR PVC-QRC-U-A-15bar 12-8/10m	2813950004	15	12	8	10	4
HR PVC-QRC-U-A-15bar 12-8/15m	2813950005	15	12	8	15	7.3
HR PVC-QRC-U-A-15bar 14-10/15m	2813950006	15	14	10	15	8.8
HR PVC-QRC-U-A-15bar 18-13/15m	2813950007	15	17.5	12.5	15	10.5

Accessories for hose rewinder, automatic

■ More safety by slowing down the rewinding hose

Model	Art. no.	Accessories
HR B 18-13/15	2813950008	for HR PVC-QRC-U-A-15bar 18-13/15m (2813950007)





Hose rewinder, automatic



- Fully fitted with quick-action coupling and long connection hose with plug nipple, ready to connect
- Flexible use with large swivel range greater than 180°
- For wall and ceiling mounting

•	With robust metal housing
•	With protected quick-action coupling
•	Abrasion-resistant, flexible air hose with antikink spring and hose locking device

Model	Art. no.	Max. pres- sure (bar)	Outer dia. (mm)	Inside dia. (mm)	Extendable length (m)	Weight (kg)
HR PVC-QRC-U-A-15bar 12-8/9m	2813950002	15	12	8	9	5
HR PVC-QRC-U-A-15bar 12-8/15m	2813950003	15	12	8	15	6

Hose rewinder, manual



- Axial connection this way the hose can also be wound and unwound during operation
- Flexible PVC hose with fabric inlay

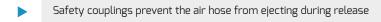
	Shock-resistant plastic housing
•	Large work radius thanks to 20 m hose

Model	Art. no.	Max. pres- sure (bar)	Outer dia. (mm)	Inside dia. (mm)	Extendable length (m)	Weight (kg)
HR PVC-QRC-U-M-15bar 15-9/20m	2813950000	15	15	9	20	3.9

Workshop equipment

Power and air supply unit

- Galvanised suspension chain relieves the connection hose and connection cable
- Electric safety device the thermal fuse automatically switches off in the event of overheating
- Robust housing splashproof and dustproof acc. to IP 44







Model	Art. no.	Schuko power outlets 16A/230V (pc.)	Cekon power outlets 16A/400V (pc.)	Compressed air connections	Suspension chain length (m)	Connection hose internal diameter (mm)	Weight (kg)
EQ EB-PVC-2QRC-SF-15bar-6*230V	2813960009	6		2	2	9	2.9
EQ EB-PVC-2QRC-SF-15bar-6*230V-1*400V	2813960010	6	1	2	2	9	2.9

Power and air supply unit

- Galvanised suspension chain relieves the connection hose and connection cable
- Robust housing splashproof and dustproof acc. to IP 44
- Ready to connect thanks to connected electric cable with plug and air hose (length: 3 m) with plug nipple
- Safety couplings prevent the air hose from ejecting during release
- Connection option every 3 shockproof sockets



Model	Art. no.		Compressed air connections		Connection hose internal diameter (mm)	Weight (kg)
EQ EB-PVC-QRC-SF-12bar-3*230V	2813960011	3	1	3	9	2.0



Connecting & joining technology

User-friendly and safe



For all connections on tools, hoses and machines – from the simple nipple to the more complex safety quick-action coupling.

Connecting and joining technology

Steel safety quick-release couplings

- Safe working because the hose is not ejected when disconnected (whiplash effect), DIN EN ISO 4414 and DIN EN 983
- Hardened galvanised steel for an extended service life
- Low coupling force for easy coupling

•	Eurostandard profile with nominal width of 7.6 for extremely high air flow rate
•	Max. operating pressure 16 bar
•	Free of silicone



Model	Art. no.	Packaging unit (pc.)	Designation		
C QRC-SF-E-1/4"m	2813910018	1			
C QRC-SF-E-3/8"m	2813910019	1	Safety quick-release couplings with external thread		
C QRC-SF-E-1/2"m	2813910020	1			
C QRC-SF-E-1/4"f	2813910021	1			
C QRC-SF-E-3/8"f	2813910022	1	Safety quick-release couplings with internal thread		
C QRC-SF-E-1/2"f	2813910023	1			
C QRC-SF-E-6mm	2813910024	1		THE	
C QRC-SF-E-9mm	2813910025	1	Safety quick-release couplings hose nozzle		
C QRC-SF-E-13mm	2813910026	1			

Minimum order quantity for specialist dealers: 5 units



Steel quick-release couplings with external thread

- Hardened galvanised steel for an extended service life
- Low coupling force for easy coupling

•	Eurostandard profile with nominal width of 7.6 for extremely high air flow rate
•	Max. operating pressure 16 bar
•	Free of silicone



Model	Art. no.	Packaging unit (pc.)	Designation		
C QRC-S-E-1/4"m	2813910009	1			
C QRC-S-E-3/8"m	2813910010	1	Quick-release couplings with external thread		
C QRC-S-E-1/2"m	2813910011	1			
C QRC-S-E-1/4"f	2813910012	1			
C QRC-S-E-3/8"f	2813910013	1	Quick-release couplings with internal thread		
C QRC-S-E-1/2"f	2813910014	1			
C QRC-S-E-6mm	2813910015	1			
C QRC-S-E-9mm	2813910016	1	Quick-release couplings with hose nozzle		
C QRC-S-E-13mm	2813910017	1			

Minimum order quantity for specialist dealers: 5 units





Steel plug nipple



- Specially designed for use with steel quick-release couplings
- Hardened galvanised steel for an extended service life
- Eurostandard profile with nominal width of 7.6 for extremely high air flow rate

Designation	Model	Art. no.	Packaging unit (pc.)
	C PN-S-E-1/4"m	2813910000	1
Steel plug nipple with external thread	C PN-S-E-3/8"m	2813910001	1
	C PN-S-E-1/2"m	2813910002	1
	C PN-S-E-1/4"f	2813910003	1
Steel plug nipple with internal thread	C PN-S-E-3/8"f	2813910004	1
	C PN-S-E-1/2"f	2813910005	1
	C PN-S-E-6mm	2813910006	1
Steel plug nipple with hose nozzle	C PN-S-E-9mm	2813910007	1
	C PN-S-E-13mm	2813910008	1

Minimum order quantity for specialist dealers: 5 units

Brass quick-release couplings Euro profile



•	European standard profile
•	NW 7.2
•	Material: Brass

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Connecting and joining technology

Brass quick-release couplings Universal profile

•	European standard profile
•	NW 7.2
•	Material: Brass



Model	Art. no.	Packaging unit (pc.)	Designation		
C QRC-U-1/4"m	2813910084	1			
C QRC-U-3/8"m	2813910085	1	Quick-release couplings with external thread		
C QRC-U-1/2"m	2813910086	1		41	
C QRC-U-1/4"f	2813910087	1			
C QRC-U-3/8"f	2813910088	1	Quick-release couplings with internal thread		
C QRC-U-1/2"f	2813910089	1			
C QRC-U-6mm	2813910090	1	Quick-release couplings with hose nozzle	HID	
C QRC-U-9mm	2813910091	1			
C QRC-U-13mm	2813910092	1			

Brass plug nipples

•	European standard profile
•	NW 7.2
•	Material: Brass



Model	Art. no.	Packaging unit (pc.)	Designation		
C PN-E-1/4"m	2813910041	1			
C PN-E-3/8"m	2813910042	1	Plug nipple with external thread		
C PN-E-1/2"m	2813910043	1			
C PN-E-1/4"f	2813910044	1			
C PN-E-3/8"f	2813910045	1	Plug nipple with internal thread	13	
C PN-E-1/2"f	2813910046	1			
C PN-E-6mm	2813910038	1	Plug nipple with hose nozzle	. —	
C PN-E-9mm	2813910039	1			
C PN-E-13mm	2813910040	1			



Hoze nozzles



•	European standard profile
•	Material: Brass

	Designation	Model	Art. no.	Packaging unit (pc.)
		C HN-U-1/4"m x 6mm	2813910054	1
		C HN-U-1/4"m x 9mm	2813910055	1
_		C HN-U-3/8"m x 6mm	2813910056	1
	Hose nozzle with external thread	C HN-U-3/8"m x 9mm	2813910057	1
		C HN-U-3/8"m x 13mm	2813910058	1
		C HN-U-1/2"m x 6mm	2813910059	1
		C HN-U-1/2"m x 9mm	2813910060	1
		C HN-U-1/2"m x 13mm	2813910061	1
	Hose nozzle with internal thread	C HN-U-1/4"f x 6mm	2813910062	1
		C HN-U-1/4"f x 9mm	2813910063	1
		C HN-U-3/8"f x 6mm	2813910064	1
College Colleg		C HN-U-3/8"f x 9mm	2813910065	1
		C HN-U-1/2"f x 9mm	2813910066	1
		C HN-U-1/2"f x 13mm	2813910067	1
		C HOC-U-6mm	2813910068	1
	Hose coupling	C HOC-U-9mm	2813910069	1

Hose clamps







- Steel
- Galvanised and polished with 2 profiled lugs
- Range: 7 mm

Model	Art. no.	Packaging unit (pc.)
C HC-U-11-13mm	2813910047	1
C HC-U-13-15mm	2813910048	1
C HC-U-15-18mm	2813910049	1

Screw clamps



- Steel, polished and galvanised
- Range: 9 mm
- Screw thread with Phillips screw AF 7 mm

Model	Art. no.	Packaging unit (pc.)
C SC-U-10-16mm	2813910050	1
C SC-U-12-20mm	2813910051	1
C SC-U-16-25mm	2813910052	1
C SC-U-20-32mm	2813910053	1

Connecting and joining technology

Double nipple

Model	Art. no.	Packaging unit (pc.)	Material	Thread	Designation	
C DN-U-1/4"m x 1/8"m	2813910070	1	Galvanised steel	With internal cone		
C DN-U-1/4"m x 1/4"m	2813910071	1	Galvanised steel	With internal cone		******
C DN-U-3/8"m x 3/8"m	2813910073	1	Galvanised steel	With internal cone	Double nipple	4 Harrison Company
C DN-U-1/2"m x 1/2"m	2813910075	1	Galvanised steel	With internal cone	Double Illppie	
C DN-U-3/8"m x 1/4"m	2813910072	1	Galvanised steel	With internal cone		WWW.
C DN-U-1/2"m x 3/8"m	2813910074	1	Galvanised steel	With internal cone		

Reduction fittings

Model	Art. no.	Packaging unit (pc.)	Material	Thread	Designation	
C RE-U-1/4"m x 1/8"f	2813910076	1	Brass	With external and internal thread		
C RE-U-3/8"m x 1/4"f	2813910077	1	Brass	With external and internal thread	Reduction fitting	
C RE-U-1/2"m x 3/8"f	2813910078	1	Brass	With external and internal thread		

Reducing nipple

Model	Art. no.	Packaging unit (pc.)	Material	Thread	Designation	
C RN-U-1/4"m x 3/8"f	2813910079	1	Brass	With external and internal thread		
C RN-U-3/8"m x 1/2"f	2813910080	1	Brass	With external and internal thread	Reducing nipple	

Sleeves

Model	Art. no.	Packaging unit (pc.)	Material	Designation	
C MU-1/4"f	2813910081	1	Brass		
C MU-3/8"f	2813910082	1	Brass	Sleeve	
C MU-1/2"f	2813910083	1	Brass		



Maintenance units

Excellent air quality for every application



Achieve maximum compressed air quality and outstanding working results with our filters and maintenance units – from prefilters and microfilters through to activated carbon filters.

Maintenance units

Pressure reducer

- Pressure regulator with piston for high operational reliability
- High stability of adjusting pressure, even if the input pressure or the flow rate changes
- Assembly independent of flow direction thanks to double-sided connection option for pressure gauge

•	With lockable adjustment button
•	Regulation range 0-12 bar
•	Standard features include: pressure gauge



Model	Art. no.	Flow rate (I/min)	Connecting thread	Connection for pressure gauge	Dimensions (WxDxH)
FRL PR-1/4"f	2813920000	700	G 1/4"i	G 1/8"i	42x42x94
FRL PR-1/4"f NPT	2813920033	700	G 1/4"i	G 1/8"i	42x42x94
FRL PR-3/8"f	2813920001	2,500	G 3/8"i	G 1/8"i	60x60x130
FRL PR-3/8"f NPT	2813920034	2,500	G 3/8"i	G 1/8"i	60x60x130
FRL PR-1/2"f	2813920002	2,500	G 1/2"i	G 1/8"i	60x60x130
FRL PR-1/2"f NPT	2813920035	2,500	G 1/2"i	G 1/8"i	60x60x130
FRL PR-3/4"f	2813920003	5,600	G 3/4"i	G 1/4"i	80x80x184
FRL PR-3/4"f NPT	2813920004	5,600	G 3/4"i	G 1/4"i	80x80x184
FRL PR-1"f	2813920005	5,600	G 1"i	G 1/4"i	80x80x184
FRL PR-1"f NPT	2813920006	5,600	G 1"i	G 1/4"i	80x80x184

Water separator with filter

- Centrifugal acceleration of compressed air for efficient separation of dirt particles and condensate
- Filtering function upstream of the pressure reducer

•	Two-stage mechanical filter with 20 µm
	Semi-automatic drainage



Model	Art. no.	Connecting thread	Condensate tank volume (cm³)	Dimensions (WxDxH)
FRL WS-1/4"f	2813920007	G 1/4"i	10	42x42x142
FRL WS-1/4"f NPT	2813920036	G 1/4"i	10	42x42x142
FRL WS-3/8"f	2813920008	G 3/8"i	45	60x60x180
FRL WS-3/8"f NPT	2813920037	G 3/8"i	45	60x60x180
FRL WS-1/2"f	2813920009	G 1/2"i	45	60x60x180
FRL WS-1/2"f NPT	2813920038	G 1/2"i	45	60x60x180
FRL WS-3/4"f	2813920010	G 3/4"i	170	80x80x235
FRL WS-3/4"f NPT	2813920011	G 3/4"i	170	80x80x235
FRL WS-1"f	2813920012	G 1"i	170	80x80x235
FRL WS-1"f NPT	2813920013	G 1"i	170	80x80x235



Filter pressure reducer



- Combines the technical benefits of the pressure reducer and the water separator with filter in one compact unit
- Pressure regulator with piston for high operational reliability
- Assembly independent of flow direction thanks to double-sided connection option for pressure gauge

•	With lockable adjustment button
•	Regulation range 0-12 bar
•	Standard features include: pressure gauge and 20 µm filter element

Model	Art. no.	Flow rate (I/min)	Connection thread	Condensate tank volume (cm³)	Dimensions (WxDxH)
FRL FPR-1/4"f	2813920014	700	G 1/4"i	10	42x42x190
FRL FPR-1/4"f NPT	2813920039	700	G 1/4"i	10	42x42x190
FRL FPR-3/8"f	2813920015	2,500	G 3/8"i	45	60x60x245
FRL FPR-3/8"f NPT	2813920040	2,500	G 3/8"i	45	60x60x245
FRL FPR-1/2"f	2813920016	2,500	G 1/2"i	45	60x60x245
FRL FPR-1/2"f NPT	2813920041	2,500	G 1/2"i	45	60x60x245
FRL FPR-3/4"f	2813920017	5,600	G 3/4"i	170	80x80x332
FRL FPR-3/4"f NPT	2813920018	5,600	G 3/4"i	170	80x80x332
FRL FPR-1"f	2813920019	5,600	G 1"i	170	80x80x332
FRL FPR-1"f NPT	2813920020	5,600	G 1"i	170	80x80x332

Mist oiler



- Regular oil flow for efficient supply to tools
- Proportional adjustment of the oil supply to the air flow rate for optimal lubrication possible, even at low pressures and low air flow rates
- Oil purification downstream of the filter pressure reducer

Model	Art. no.	Connecting thread	Oil reservoir volume (cm³)	Dimensions (WxDxH)
FRL MO-1/4"f	2813920021	G 1/4"i	50	42x42x156
FRL MO-1/4"f NPT	2813920042	G 1/4"i	50	42x42x156
FRL MO-3/8"f	2813920022	G 3/8"i	150	60x60x195
FRL MO-3/8"f NPT	2813920043	G 3/8"i	150	60x60x195
FRL MO-1/2"f	2813920023	G 1/2"i	150	60x60x195
FRL MO-1/2"f NPT	2813920044	G 1/2"i	150	60x60x195
FRL MO-3/4"f	2813920024	G 3/4"i	379	80x80x260
FRL MO-3/4"f NPT	2813920045	G 3/4"i	379	80x80x260
FRL MO-1"f	2813920025	G 1"i	379	80x80x260
FRL MO-1"f NPT	2813920046	G 1"i	379	80x80x260

Maintenance units

Filter units

- Fully fitted maintenance system consisting of filter pressure reducer and mist oiler (2-way filter unit) or filter water separator, pressure reducer and mist oiler (3-way filter unit) ready for immediate operation
- Pressure regulator with piston for high operational reliability

•	With lockable adjustment button
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- Regulation range 0-12 bar
- Standard features include: pressure gauge and 20 µm filter element



Model	Art. no.	Flow rate (I/min)	Version	Connecting thread	Dimensions (WxDxH)
FRL FPR-MO-1/4"f	2813920026	700	double	G 1/4"i	84x42x190
FRL FPR-MO-1/4"f NPT	2813920047	700	double	G 1/4"i	84x42x190
FRL FPR-MO-3/8"f	2813920027	2,500	double	G 3/8"i	120x60x245
FRL FPR-MO-3/8"f NPT	2813920048	2,500	double	G 3/8"i	120x60x245
FRL FPR-MO-1/2"f	2813920028	2,500	double	G 1/2"i	120x60x245
FRL FPR-MO-1/2"f NPT	2813920049	2,500	double	G 1/2"i	120x60x245
FRL FPR-MO-3/4"f	2813920029	5,600	double	G 3/4"i	160x80x332
FRL FPR-MO-3/4"f NPT	2813920030	5,600	double	G 3/4"i	160x80x332
FRL FPR-MO-1"f	2813920031	5,600	double	G 1"i	160x80x332
FRL FPR-MO-1"f NPT	2813920032	5,600	double	G 1"i	160x80x332



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