

OPERATING MANUAL

Pressure Reducing Station

077838

INTRODUCTION

This manual contains operating instructions for the

Pressure Reducing Station 077838

manufactured by BAUER Kompressoren GmbH, Munich.

All instructions should be observed and carried out in the order laid down to prevent damage and premature wear to the equipment and the units served by it.

The company voids all warranties for malfunction and damage resulting from failing to follow these instructions.

WARNING

! This unit is part of a pneumatic high pressure system !
Non-compliance with the operating and service instructions can cause severe injury or death.

ANNEX

Drawing	077838
Applicable parts list:	G54.0

Operating Manual Pressure Reducing Station

1. GENERAL

Purpose

The pressure reducing station reduces the pressure coming from the compressor unit (max. 365 bar) to a max. outlet pressure of 5 bar. This is effected by a pressure reducer which can be adjusted to the desired outlet pressure.

Description

For the piping hoses with an external diameter of 10 mm have to be used. For hoses with an external diameter of 8 mm reducer Part no. N15502 has to be used (not part of standard delivery scope).

The pressure reducer reduces the inlet pressure to the desired outlet pressure:

077838-V001 to	5-40 bar
077838-V002 to	41-100 bar
077838-V003 to	101-220 bar
077838-V004 to	221-350 bar

The two pressure gauges show the inlet pressure (3) and the outlet pressure (5) (see Fig. 1 and Fig. 2).

The separator installed before the pressure reducer prevents the pressure reducer seat from dirt.

Technical data

Operating pressure max. 365 bar

Pressure gauge indicating range
inlet pressure: 0 to 400 bar
Pressure gauge indicating range
outlet pressure: 0 - 160 bar

Air inlet/outlet 10 mm
(external pipe diameter)

Preparation for operation

Before taking pressure reducing station into operation please observe the following:

- both shut-off valves (1) and (2) have to be open (see Fig. 1 and Fig. 2)
- check all connections for leakage.

Operation

Adjust pressure reducer (4) to the desired pressure shown at pressure gauge (5).

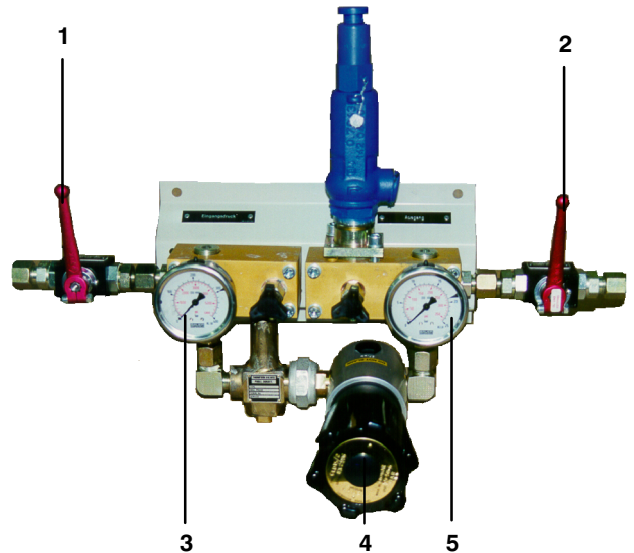


Fig. 1 Pressure reducing station 365/5-40 bar

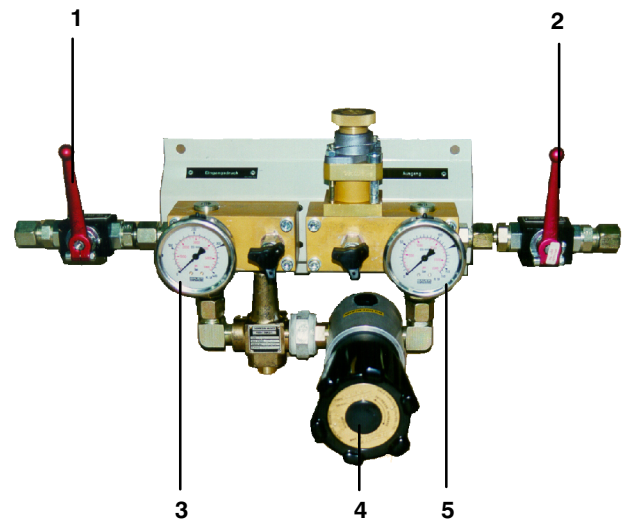


Fig. 2 Pressure reducing station 365/221-350 bar

2. VALVE FUNCTION

Lift knurled wheel on the valve until valve blows off.

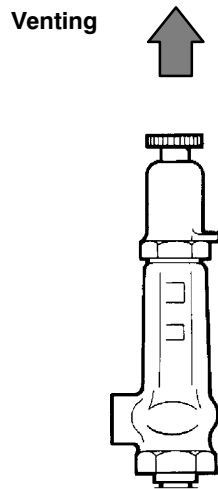


Fig. 3 Venting the final pressure safety valve

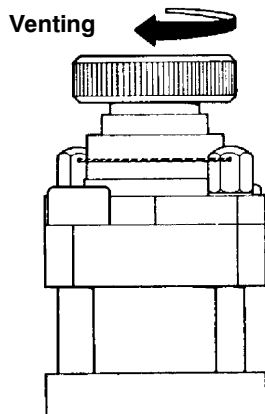


Fig. 4 Venting the final pressure safety valve

2.1. CHECKING FUNTCTION

The final pressure safety valve has to be checked regularly. For this purpose operate the unit until final pressure is reached and final pressure safety valve blows off. Compare venting pressure of safety valve with pressure gauge.

On compressors fitted with a factory-installed **COMP-TRONIC** compressor control unit, switch to "test operation - continuous mode" to override pressure switch.

Operating Manual Pressure Reducing Station

3. SAFETY NOTES

WARNING

Never open filling valves when under pressure and not connected as highly compressed air emerging can cause serious accidents.



Check the complete system for leakage from time to time by brushing all fittings and couplings with soapy water or spraying with leak test spray. Repair any leakage.

4. MAINTENANCE

Clean pressure reducing station from time to time.

We recommend that pressure gauges are checked from time to time. For this purpose we have developed a special test pressure gauge with an adaptor which immediately recognizes any deviations in readings.

See High Pressure Accessories Catalogue no. 8550/7.92.

Slight deviations during operation are normal and can be ignored. Excessive inaccuracy will require the pressure gauge to be replaced.

Operating Manual Pressure Reducing Station

5. ANNEX

- Parts list

- Drawing

Ersatzteilliste	G54.0	Druckreduzierstation
Spare parts catalogue	G54.0	Pressure reducing station
Liste de pièces	G54.0	Station de réduction haute-pression



Baugruppe	Assembly	Groupe d'assemblage	Seite/page
Druckreduzierstation 077838-V001 ...	Press. red. station 077838-V001	Station de réd 077838-V001	G54.0- 1
Druckreduzierstation 077838-V002 ...	Press. red. station 077838-V002	Station de réd 077838-V002	G54.0- 2
Druckreduzierstation 077838-V003 ...	Press. red. station 077838-V003	Station de réd 077838-V003	G54.0- 3
Druckreduzierstation 077838-V004 ...	Press. red. station 077838-V004	Station de réd 077838-V004	G54.0- 4
Druckreduzierstation 077841	Press. red. station 077841	Station de réd 077841	G54.0- 5

Änder.-Nr. Change no. No. de change	Datum Date	Änderung	Change	Changement
0	01.11.1998	Grundaussgabe	Basic edition	Edition de base
1				
2				
3				
4				
5				

Wichtige Hinweise für Teilebestellung:

Bestell-Nr., die mit der Ziffer 0 beginnen, bezeichnen Baugruppen, die komplett geliefert werden. Teile ohne Bestell-Nr. sind nur zur Information für die Montage aufgeführt. Sie sind nicht als Ersatzteil erhältlich. Bei Ersatzteilbestellungen erwarten Sie unsere richtige Lieferung; deshalb benötigen wir von Ihnen folgende Angaben (siehe unten gezeigtes Typenschild):

1. Modellbezeichnung, Fabrik-Nr. sowie Fertigungsstand von Anlage/Block
2. Stückzahlen
3. Benennung und Best.-Nr. des gewünschten Teils

Bestell-Beispiel:

Für Kompressorblock ...
Fabrik-Nr. 524-0528/1/2 drei Dichtungen
8263-090

Important notes for spare parts orders:

Part nos. beginning with digit 0 indicate parts available as complete assemblies. Parts without part no. are indicated for assembly reference, only. These parts are not available as single parts. When placing an order for spare parts, please give the following items so as to ensure our correct delivery (see identification plate shown below):

1. Model, serial no. as well as design standard of unit/block
2. Quantity required
3. Name and part no.

Example for order:

For compressor block ...
serial no. 524-0528/1/2, three gaskets
8263-090

Avis important pour la commande de pièces:

Les nos. de commande commençant par le chiffre 0 indiquent les pièces livrées au complet. Les pièces sans no. de commande sont indiquées uniquement pour information de montage. Elles ne sont pas livrées individuellement. Pour que la livraison de pièces de rechange corresponde à la commande, veuillez bien nous fournir les données suivantes (voir plaque d'identité ci-dessous):

1. Modèle, no. de série et standard de construction de bloc compresseur/groupe
2. Quantité désirée
3. Dénomination et no. de commande de la pièce désirée

Exemple de commande:

Pour bloc compresseur ...
no. de série 524-0528/1/2, trois joints no. de cde. 8263-090



Wartungssätze

- a =Wartungssatz 1000 h
- b =Wartungssatz 2000 h
- c =Wartungssatz 4000 h



Maintenance kit

- a = Maintenance kit 1000 h
- b = Maintenance kit 2000 h
- c = Maintenance kit 4000 h



Kits de pièces d'entretien :

- a = Kit d'entretien 1000 h
- b = Kit d'entretien 2000 h
- c = Kit d'entretien 4000 h

In den Spalten sind die im entsprechenden Satz enthaltenen Teile angekreuzt. Bitte beachten, daß die höheren Sätze die untergeordneten nicht beinhalten, d.h. für eine 4000-Stunden-Wartung wird 1x Satz a, 1x Satz b und 1x Satz c benötigt.

The columns contain the parts that are included in the respective parts set. Please note that the higher graded kits do not include the lower ones, i.e. for a 4000 hours maintenance, one kit a, one kit b plus one kit c are required.

Les pièces contenues dans les kits correspondants sont marquées d'une croix dans les colonnes. Veuillez observer que les kits supérieurs ne contiennent pas les kits subordonnés, c'est-à-dire pour un entretien de 4000 heures il faut avoir 1x kit a, 1x kit b et 1x kit c.

Anmerkungen zur Identifikation:
Remarks for identification:
Remarques pour l'identification:

Modell/Model/Modèle		Fabrik-Nr./Serial no./Numéro de série	
[] - [] / [] / []		Jahr/Year	[]
Volumenstrom m3/min	[]	n/min. r.p.m.	[]
Free air delivery Scfm	[]	kW	[]
Betriebsüberdruck bar	[]	CE	KB 73708
Max. working press. psig	[]		
		Fertigungsstand / Modification no. / No. de modification	[]
		Anlage/Unit/Groupe	[]
		Kompressorblock / Compressor block / Bloc compresseur	[]



ACHTUNG

Nur Schrauben und Stiftschrauben der Qualität 8.8 verwenden!



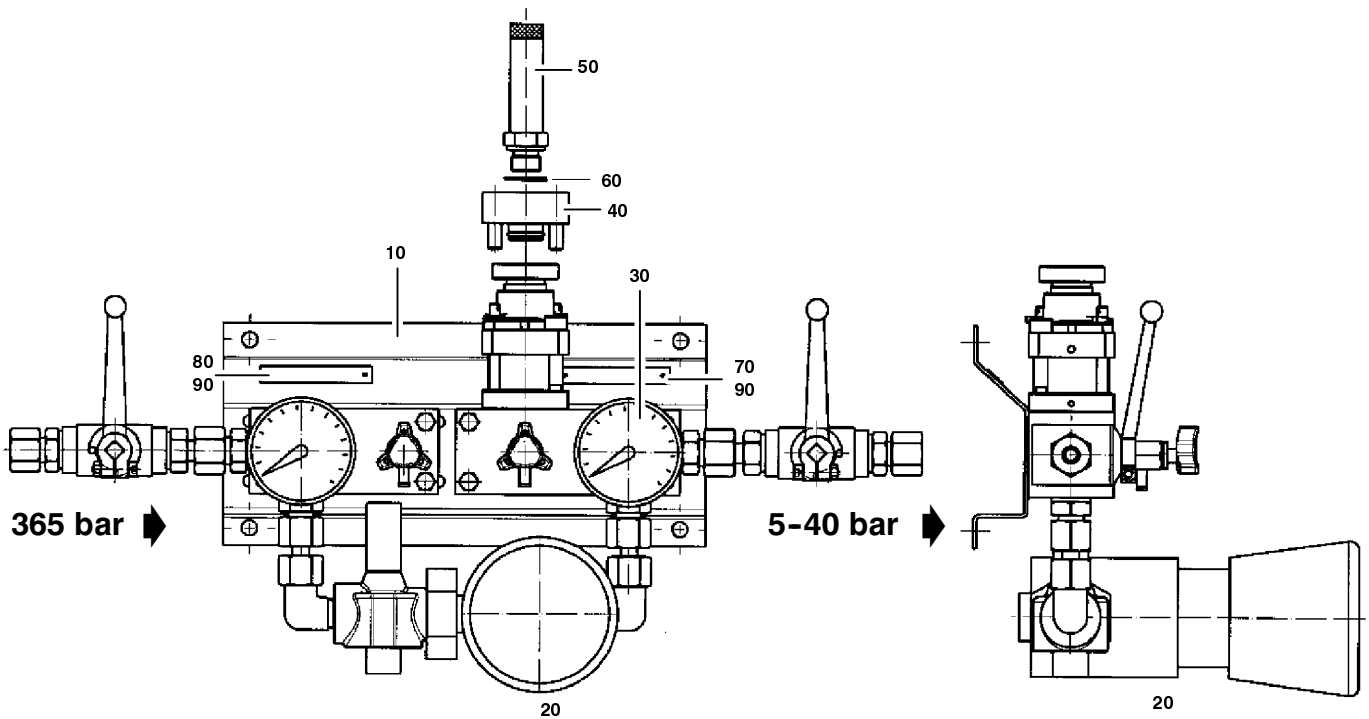
ATTENTION

Use only screws and studs in quality 8.8! This quality is equivalent to SAE J 429 d grade 5.



ATTENTION

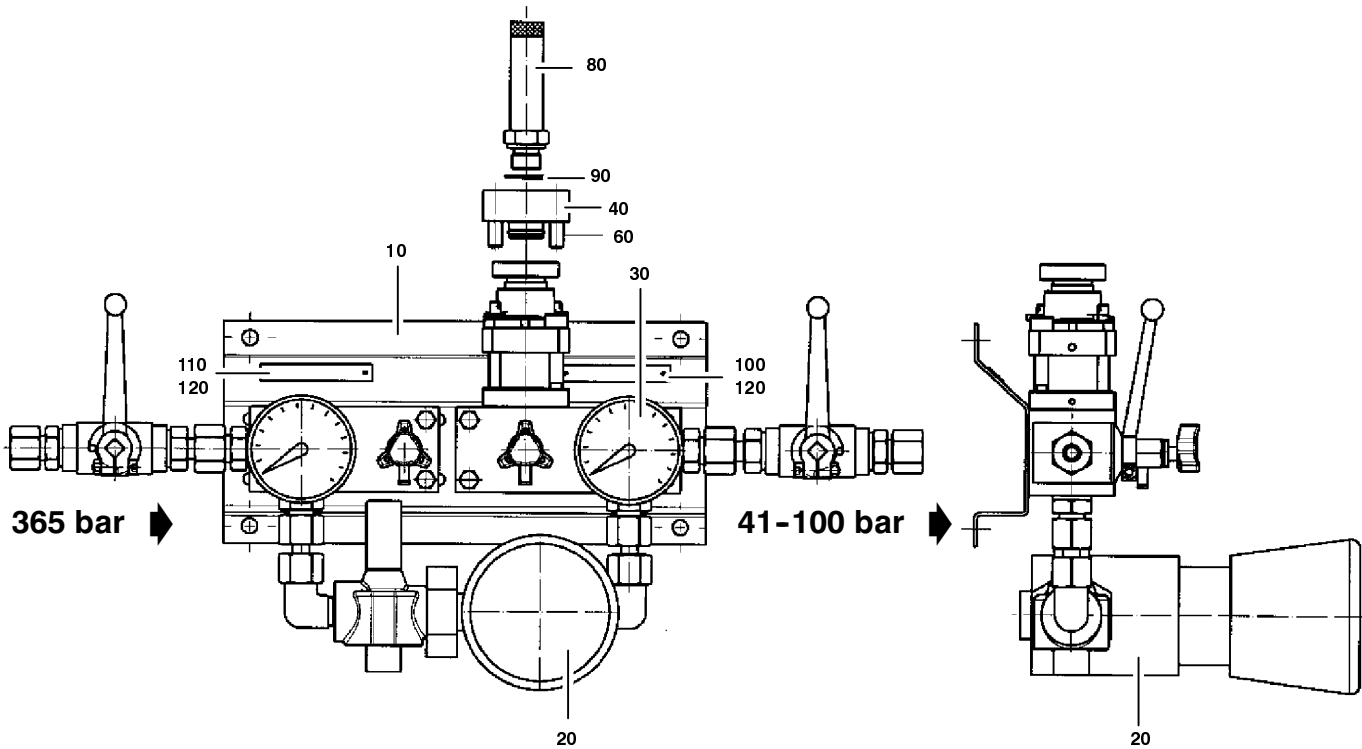
N'utiliser que des vis et des goujons filetés de la qualité 8.8!



077838/11/98


Wartungssätze
Mainenance sets
Kits de maintenance
Baugruppe 077838-V001 **Druckreduzierstation**
Assembly 077838-V001 **Pressure reducing station**
Assemblage 077838-V001 **Station de réduction haute pression**
G54.0- 1

Klasse/ Class/ Classe			Pos.	Bestell-Nr. Part No. No. de cde.	Anz. Qty. Qté.	Benennung	Designation	Dénomination	Gew. Weight Poids (kg)	Abmessungen Dimensions Dimensions
a	b	c								
			10	077841	1	Reduzierstation	Pressure red. station	Station de réduction		
			20	N15859	1	Druckminderer	Pressure reducer	Réducteur de pression		365/5-40 bar
			30	N15543	1	Manometer	Pressure gauge	Manomètre		0 - 60 bar
			40	064038	1	Flansch	Flange	Bride		
			50	N25197	1	Sicherheitsventil	Safety valve	Soupape de sûreté		12 bar
				N15214	1	Sicherheitsventil	Safety valve	Soupape de sûreté		40 bar
				N18383	1	Sicherheitsventil	Safety valve	Soupape de sûreté		22 bar
				N19354	1	Sicherheitsventil	Safety valve	Soupape de sûreté		15 bar
				N19355	1	Sicherheitsventil	Safety valve	Soupape de sûreté		20 bar
				N19356	1	Sicherheitsventil	Safety valve	Soupape de sûreté		25 bar
				N19357	1	Sicherheitsventil	Safety valve	Soupape de sûreté		30 bar
				N19358	1	Sicherheitsventil	Safety valve	Soupape de sûreté		35 bar
				N21705	1	Sicherheitsventil	Safety valve	Soupape de sûreté		11 bar
				N3943	1	Sicherheitsventil	Safety valve	Soupape de sûreté		8 bar
			60	N4499	1	USIT - Ring	Gasket	Joint		U 16.7-24-1.5/st./NBR
			70	76045	1	Schild Ausgang	Label OUT	Plaque Sortie		
			80	57463	1	Schild Eingangsdruck	Label IN	Plaque Entré		
			90	N3333	4	Blindniet	Rivet	Rivet		2.4x5.1/Al



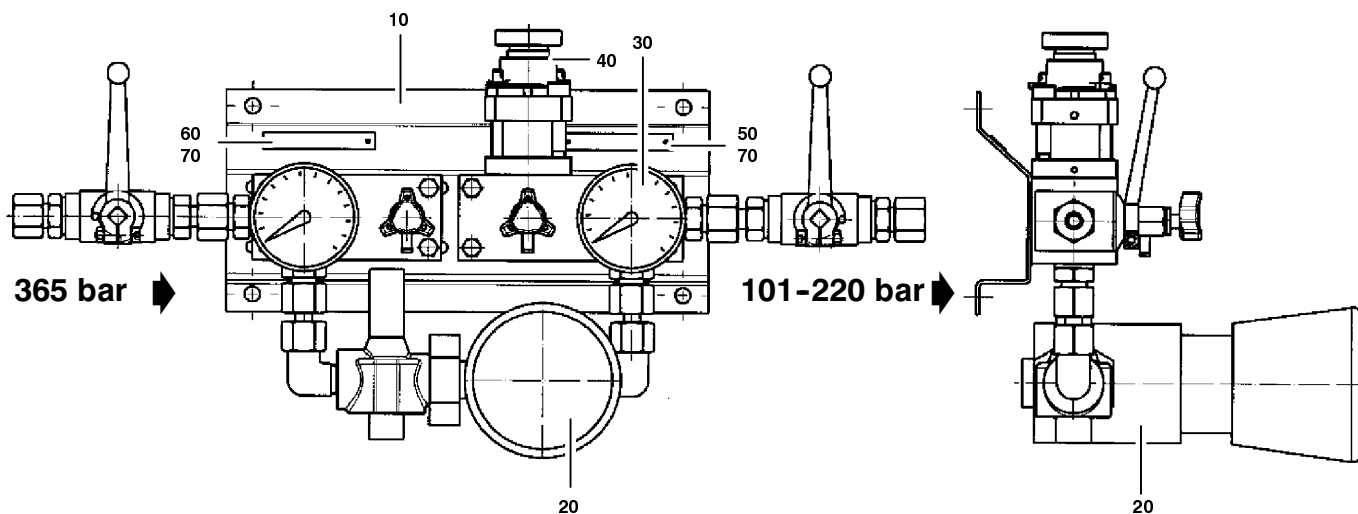
077838/11/98


 Wartungssätze
 Maintenance sets
 Kits de maintenance

Baugruppe	077838-V002	Druckreduzierstation
Assembly	077838-V002	Pressure reducing station
Assemblage	077838-V002	Station de réduction haute pression

G54.0- 2

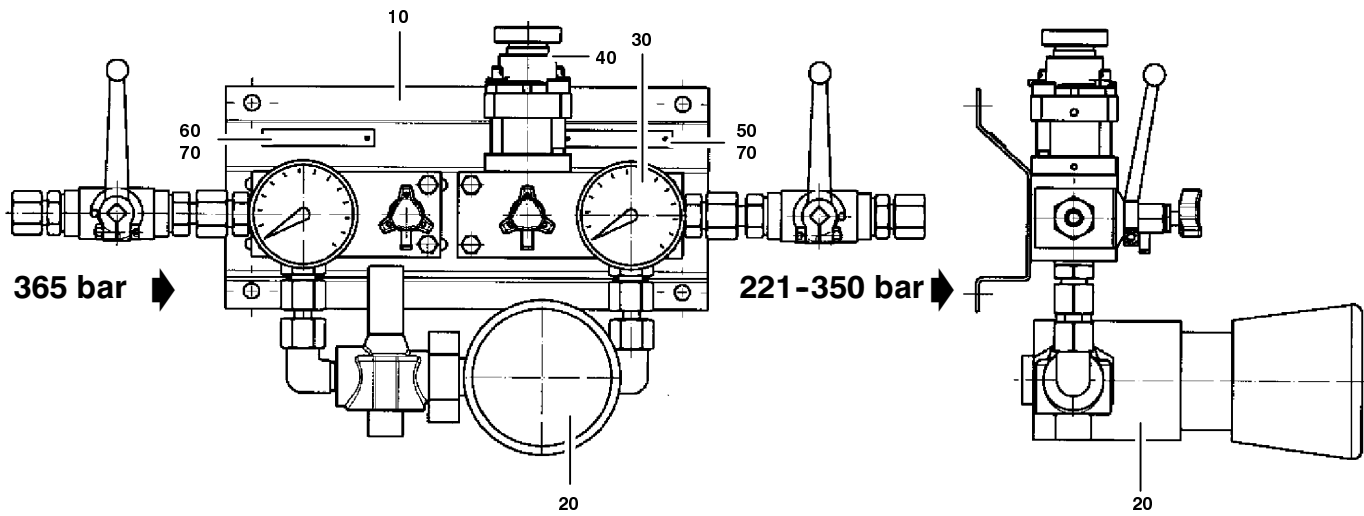
Klasse/ Class/ Classe			Pos.	Bestell-Nr. Part No. No. de cde.	Anz. Qty. Qté.	Benennung	Designation	Dénomination	Gew. Weight Poids (kg)	Abmessungen Dimensions Dimensions
a	b	c								
			10	077841	1	Reduzierstation	Pressure red. station	Station de réduction		
			20	N15860	1	Druckminderer	Pressure reducer	Réducteur de pression		365/41-100 bar
			30	N1273	1	Manometer	Pressure gauge	Manomètre		0 - 160 bar
			40	67797	1	Aufnahme	Receptacle	Siège		
			50	64119	1	Flansch	Flange	Bride		
			60	N19548	1	Zylinderschraube	Allen screw	Vis six pans creux		M8x25;8.8;A3A
			70	N882	1	O-Ring	O-ring	Joint torique		16x2;NBR;72shore
			80	N21941	1	Sicherheitsventil	Safety valve	Soupape de sûreté		61-75 bar; G1/2"
			90	N4616	1	USIT-Ring	Gasket	Joint		U 16.7-24-1.5/st./NBR
			100	76045	1	Schild Ausgang	Label OUT	Plaque Sortie		
			110	57463	1	Schild Eingangsdruck	Label IN	Plaque Entrée		
			120	N3333	4	Blindniet	Rivet	Rivet		2.4x5.1/Al



077838/11/98


Wartungssätze
Maintenance sets
Kits de maintenance
Baugruppe 077838-V003 **Druckreduzierstation**
Assembly 077838-V003 **Pressure reducing station**
Assemblage 077838-V003 **Station de réduction haute pression**
G54.0- 3

Klasse/ Class/ Classe			Pos.	Bestell-Nr. Part No. No. de cde.	Anz. Qty. Qté.	Benennung	Designation	Dénomination	Gew. Weight Poids (kg)	Abmessungen Dimensions Dimensions
a	b	c								
			10	077841	1	Reduzierstation	Pressure red. station	Station de réduction		
			20	N15860	1	Druckminderer	Pressure reducer	Réducteur de pression		365/41-100 bar
			30	N22330	1	Manometer	Pressure gauge	Manomètre		0 - 400 bar
			40	059410	1	Sicherheitsventil	Safety valve	Soupape de sûreté		61-75 bar; G1/2"
			50	76045	1	Schild Ausgang	Label OUT	Plaque Sortie		
			60	57463	1	Schild Eingangsdruck	Label IN	Plaque Entré		
			70	N3333	4	Blindniet	Rivet	Rivet		2.4x5.1/Al

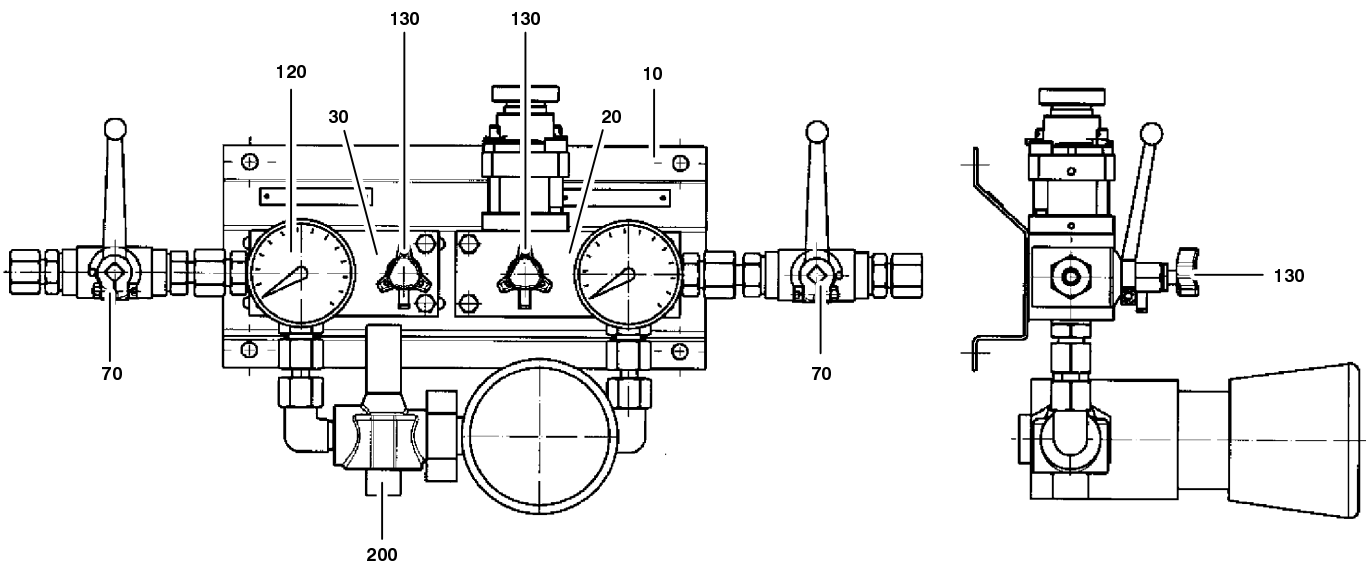


077838/11/98


Wartungssätze
 Maintenance sets
 Kits de maintenance

Baugruppe 077838-V004 **Druckreduzierstation**
Assembly 077838-V004 **Pressure reducing station**
Assemblage 077838-V004 **Station de réduction haute pression**
G54.0- 4

Klasse/ Class/ Classe			Pos.	Bestell-Nr. Part No. No. de cde.	Anz. Qty. Qté.	Benennung	Designation	Dénomination	Gew. Weight Poids (kg)	Abmessungen Dimensions Dimensions
a	b	c								
			10	077841	1	Reduzierstation	Pressure red. station	Station de réduction		
			20	N15861	1	Druckminderer	Pressure reducer	Réducteur de pression		365/41-100 bar
			30	N22330	1	Manometer	Pressure gauge	Manomètre		0 - 400 bar
			40	059410	1	Sicherheitsventil	Safety valve	Soupape de sûreté		61-75 bar; G1/2"
			50	76045	1	Schild Ausgang	Label OUT	Plaque Sortie		
			60	57463	1	Schild Eingangsdruck	Label IN	Plaque Entrée		
			70	N3333	4	Blindniet	Rivet	Rivet		2.4x5.1/Al



077838/11/98


Wartungssätze
Maintenance sets
Kits de maintenance
Baugruppe 077841
Assembly 077841
Assemblage 077841

Druckreduzierstation
Pressure reducing station
Station de réduction haute pression
G54.0- 5

Klasse/ Class/ Classe			Pos.	Bestell-Nr. Part No. No. de cde.	Anz. Qty. Qté.	Benennung	Designation	Dénomination	Gew. Weight Poids (kg)	Abmessungen Dimensions Dimensions
a	b	c								
			10	77822	1	Blech, Reduzierstation	Console	Console		
			20	77820	1	Vierkant	Block	Bloc		
			30	77821	1	Vierkant	Block	Bloc		
			40	N3119	8	Sechskantschraube	Hex. screw	Vis hex.		M6x60
			50	N102	8	Scheibe	Washer	Rondelle		B6.4
			60	N287	8	Sechskantmutter	Hex. nut	Ecrou hex.		M6
			70	N4215	2	2/2-Wege-Kugelhahn	2/2-way shutoff valve	Robinet à 2/2 voies		DN10; G3/8; PN500
			80	N15501	4	Gerade Rohrverschraubung	Male connector	Raccord droit mâle		EGES 10-SR-WD-SV
			90	N20228	2	Gerade Rohrverschraubung	Male connector	Raccord droit mâle		GES 10-SR-WD
			100	N4011	2	Schneidring	Compression ring	Joint de compression		R10
			110	N4010	2	Überwurfmutter	Cap nut	Ecrou borgne		M10 S
			120	N22330	1	Manometer	Pressure gauge	Manomètre		0-400 bar
			130	011430	2	Ablaßhahn	Drain valve	Robinet		
			140	N20228	2	Gerade Rohrverschraubung	Male connector	Raccord droit mâle		GES 10-SR-WD
			150	N20337	2	Winkelrohrverschraubung	Male elbow	Raccord coudé mâle		WES 10 SRK
			160	N4010	4	Überwurfmutter	Cap nut	Ecrou		M10 S
			170	N4011	4	Schneidring	Compression ring	Joint de compression		R10
			180	N4699	mm	Rohr	Tube	Tuyau		10x1,5
			190	N4699	mm	Rohr	Tube	Tuyau		10x1,5
			200	N17325	1	Filter	Filter	Filtre		20 µm; 420 bar
			210	N16266	4	Verschlußschraube	Plug	Bouchon fileté		VS-R3/8-WD; G3/8

